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AUTHOR Larkin, Judith E.; And Others
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ABSTRACT

Previous research on the primacy effect in ability attribution has focused on intellectual ability, using intelligence test problems as the stimulus material. To examine ability attribution under conditions of ascending (improving), descending, and random patterns of performance on a typing task, 179 college students (69 males, 110 females) evaluated applicants for a typist position based on typing tests results. Ratings of the typist's ability, motivation, and expected future performance were also measured. An analysis of the results showed that fewer errors were associated with ascending as compared to descending performance, while the random performance pattern elicited the highest number of recalled and predicted errors. The ascending performer was rated as a better typist and was seen as significantly more competent than either the descending or random performers. The ascending performer also scored significantly higher on the motivational attributions of concern about doing well, level of concentration, and motivation. Fatigue was perceived as a significant factor affecting the descending performer, while practice was perceived as a factor helping the ascending performer. No significant main effects for sex of typist were found. These findings suggest the need for caution in generalizing about the primacy effect in ability attribution. (BL)

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Hope for Late Bloomers: Another Look at the Primacy
Effect in Ability Attribution

Judith E. Larkin, Theresa d'Eredita, Susan Dempsey,
Marjorie Pepe and Joanne McClure

Canisius College

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Requests for reprints should be sent to Judith E. Larkin,
Department of Psychology, Canisius College, Buffalo, New York 14208.

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Running head: PRIMACY EFFECT

Abstract

The authors contend that the primacy effect in ability attribution has been a consistent finding because previous research has focused almost exclusively on intellectual ability, which is not expected to change while performing a task. Using typing as the experimental task, the present experiment examined ability attribution under conditions of ascending, descending, and random patterns of performance. Contrary to previous studies showing the superiority of the descending performer, it was predicted that the perceiver would place greater weight on the most recent trials and evaluate the ascending (improving) performer as having more ability than either the descending or random performer. Results confirmed the hypothesis and suggest the need for caution in generalizing about the primacy effect in ability attribution.

Hope for Late Bloomers: Another Look at the Primacy Effect in Ability Attribution

A primacy effect in attributing ability to others has been a consistent finding in the social psychological literature. According to the primacy effect, the earliest information about performance will have more impact than later information on judgments of a person's ability. Jones, Rock, Shaver, Goethals, and Ward (1968) reported in a series of experiments that, contrary to prediction, the descending performer--the one whose performance pattern showed a systematic downward trend--was consistently judged as having more ability than a performer who did increasingly well (ascending performer) or one whose successes and failures were randomly distributed across trials. Subsequent studies varying the pattern of performance (e.g. Benassi, 1982; McAndrew, 1981; Newton & Rindner, 1979; Thompson, 1973) have repeatedly confirmed the perceived superiority of the descending performer in ability and expected future performance.

Despite the consistency of the results, a major concern arises about making generalizations about ability attribution from these studies. Each of the above studies focused on intellectual ability, using intelligence test problems as the stimulus materials. However, unlike other abilities, intellectual ability is not one that is expected to change in the course of performing a task. Expecting an unvarying ability level, the perceiver may pay more attention to early than later information (Jones et al., 1968) or alternatively, as Newton and Rindner (1979) propose, form an early judgment at

the point of subjectively sufficient information, and not use the later information. In either case, the resulting primacy effect is predicated on the expectation of an unchanging ability level even in the face of a varying performance. For an ability that is expected to remain constant, the primacy effect is an understandable and predictable outcome of efficient information processing.

In everyday life, however, we assume that most abilities can and do change with experience. Time has blurred the distinction made years ago (e.g. Deese, 1958) between ability as innate capacity and skill which develops with practice. The assumption is commonly made that skills (abilities) develop through training and that ability levels can be raised with practice. In one frequently overlooked study, Jones and Welch (1971) used a strategic game situation to investigate ability attribution under conditions where an individual can learn from experience. In this gaming setting they found evidence of a recency effect wherein the player doing better at the end of the game was considered more able.

The present experiment focuses on typing, a common skill that is affected by practice, and examines ability attribution under conditions of ascending, descending and random performance patterns. For this kind of task, the perceiver in observing an ascending performance pattern should place greater weight on the most recent trials as reflecting the performer's true ability and motivation. For the descending pattern, information from the more recent trials contradicts the early positive impression and should

produce a lower ability evaluation. However, since abilities once exhibited are taken as indications of what a person can do, the perceiver is likely to seek other explanations (e.g. fatigue, luck) for the deterioration of performance. A random performance, which shows no early evidence of ability or improvement, may be viewed even more negatively.

In summary, the experiment tests the hypothesis that the ascending performer will be perceived as having more ability than either the descending or random performer and will be expected to perform better than either on a subsequent task. In other words, a recency effect was predicted. It was further predicted that subjects would make inferences about the performer's motivation and other personal traits based on performance pattern. Finally, sex of typist (including a no-sex condition) was varied in order to determine whether differential attribution to luck or skill (Deaux & Emswiller, 1974) would be made for male and female typists.

Method

Subjects

Subjects were 179 undergraduates (69 males, 110 females) who volunteered to participate in their introductory psychology classes. They were randomly assigned to one of nine conditions (3 sex x 3 performance patterns) which were run simultaneously in several large group sessions.

Procedure

Subjects were asked to evaluate an applicant for the position

of typist trainee in a downtown company. They were handed a brochure containing a three page typing test purportedly taken by the applicant, and separately, a copy of the same test with no mistakes. Using the perfect copy as a model, subjects were asked to go through the test and circle all errors. (In order to make a fairly large number of errors believable, subjects were also told that the job applicants were students completing a first typing course). The pattern of errors and the name (or no name) on the test constituted the manipulation of the independent variables. Ascending, descending and random performance patterns were created by typing the same passages with the following number of errors per page: 15, 3, 2 (ascending); 2, 3, 15 (descending); 7, 7, 6 (random). The dependent variables, measured following the correction of the typing test, included ratings of the typist's ability, motivation, and expected future performance as well as other inferences about the person and the performance.

Results

Since no significant main effects were found for sex of typist, data from the male, female, and sex unspecified conditions were combined. Analyses of variance provided strong support for the hypothesized recency effect (see Table 1). Significant main effects were found for the number of errors typists were recalled to have made, $F(2, 176) = 15.76$ ($p < .001$), and also for the number of errors expected on a future performance, $F(2, 176) = 10.32$ ($p < .001$). In both cases fewer errors were associated with the ascending as

Insert Table 1 about here

compared to the descending performance, while the random performance pattern elicited the highest number of recalled and predicted errors. Not surprisingly, on other measures correlated with perceived performance, significant main effects were also found: evaluation of typist, $F(2, 176) = 9.73$ ($p < .001$), and competence $F(2, 176) = 3.22$ ($p < .05$). Planned contrasts showed that the ascending performer was rated as a better typist ($p < .003$) and significantly more competent ($p < .05$) than either the descending or random performers, who did not differ from each other.

Motivational attributions were also in keeping with the hypotheses. Significant main effects were found for concern about doing well ($p < .001$), level of concentration ($p < .001$), and motivation ($p < .01$), with subsequent t -tests showing significantly higher ratings for the ascending performer. Fatigue was perceived as a factor significantly affecting the descending more than the ascending performer, $F(2, 176) = 7.34$ ($p < .001$), while practice gained during the test was perceived as a factor helping the ascending more than the descending performer, $F(2, 176) = 24.04$ ($p < .001$). Analyses of variance revealed no differences in attributions of anxiety, luck, or test difficulty. Also, no significant differences were found for typist's intelligence or "chances of developing into an excellent typist."

Discussion

In their discussion, Jones et al., (1968, p. 340) state, "The 'late blooming' worker or student may never get the recognition for his ability that he deserves." In the present experiment, however, late blooming performers were recognized for their ability, effort, and motivation to succeed. Results from this experiment suggest that the primacy effect in ability attribution may apply only when ability level is assumed to be constant.

There is evidence that people have assumptions about abilities and whether the abilities can change with practice; and they bring these assumptions to the performance task. In the Jones et al., (1968) experiment subjects presumably expected mental ability to be unchanging and consequently did not attribute differences in motivation to the ascending and descending performer. In the present study where practice is assumed to improve ability level, subjects inferred increased motivation from the ascending pattern and attributed the deteriorating performance to fatigue. In all conditions they assumed that the skill or ability level would be higher on a subsequent task. While the consistency of the present findings is impressive, the explanation would benefit from future research directly manipulating perception of the different consequences for ability attribution of practice on the same task.

The present findings suggest the need to re-evaluate previous research and exercise caution in generalizing about the primacy effect in ability attribution. For an ability that is assumed to develop and improve with practice, the perceiver appears to respond

_____ to the overall pattern of performance and place greater weight on the most recent information in making attributions of ability.

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Table 1

Means for Dependent Variables in Ascending, Descending and Random Performance Pattern Conditions

| | Ascending Pattern ^a | Descending Pattern ^b | Random Pattern ^c | F (2, 176) |
|--|-----------------------------------|------------------------------------|--------------------------------|------------|
| Errors Recalled | 14.7 _a | 17.7 _b | 22.6 _c | 15.76** |
| Predicted Future Errors | 9.9 _a | 12.7 _a | 18.3 _b | 10.32** |
| Evaluation of Typist (1 = very poor, 7 = very good) | 4.5 _a | 3.9 _b | 3.6 _{bc} | 9.73** |
| Motivation (1 = unmotivated) | 4.7 _a | 4.1 _b | 4.1 _{bc} | 4.64* |
| Intelligence (1 = below average) | 4.5 _{abc} | 4.3 _{abc} | 4.3 _{abc} | 1.10 |
| Level of Concentration (1 = low) | 4.4 _a | 3.5 _b | 3.4 _{bc} | 9.36** |
| Concern About Doing Well (1 = not concerned) | 4.7 _a | 3.9 _b | 4.0 _{bc} | 7.17** |
| Hiring, (1 = would not hire) | 4.6 _a | 4.1 _b | 3.8 _{bc} | 5.12** |
| Likely to Become Excellent Typist (1 = not likely) | 5.1 _{abc} | 5.1 _{abc} | 5.0 _{abc} | <1 |

Note: Means with different subscripts differ significantly at $p < .05$ ^a_n = 62. ^b_n = 65. ^c_n = 52.* $p < .01$ ** $p < .001$